



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,197	07/28/2003	Steven Perry Sturm	ACC 048 PA	6118
29673	7590	06/14/2005	EXAMINER	
STEVENS & SHOWALTER LLP 7019 CORPORATE WAY DAYTON, OH 45459-4238			VU, MINDY D	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

HA

# Office Action Summary

Application No.

10/628,197

Applicant(s)

STURM, STEVEN PERRY

Examiner

Mindy Vu

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-17 is/are allowed.
- 6) ☒ Claim(s) 1, 3-9, 11-14 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 2 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08).  
Paper No(s)/Mail Date 10/31/03&12/17/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

This Office Action is in response to the Applicant's application filed on July 28, 2003.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-9, 11-14, 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Typpo (US 2004/0155196).

With respect to Claims 1 and 18, Typpo discloses an apparatus for measuring a characteristic of a web of material by detecting a beta radiation beam after passage through said web of material (Paragraph 0008) comprising:

- an inner detector S21 generally aligned with a beta radiation beam 26 to be detected and generating an inner signal representative of an inner portion of said beam 26 received by said first detector S21;
- at least one outer detector S11 at least partially surrounding said inner detector S21 and generating a corresponding outer signal representative

of an outer portion of said beam 26 received by said at least one outer detector S11;

- and a controller 20 receiving said inner and outer signals and generating an inner characteristic signal R2 from said inner signal, an outer characteristic signal R1 from said outer signal and a combined characteristic signal R from a combination of said inner and outer signals, the beam shape is measured by two calculations of R1 and R2 and it changes shape based upon the basis weight, so R1 and R2 are used to compensate R for changes in the beam shape. Therefore, the third value R is compensated using first and second values R1 and R2 for basis weight. See Figs. 1 & 2; Paragraphs 0033, 0042, and 0060.

With respect to Claim 3, Typpo discloses wherein said characteristic is area weight of said web of material (Paragraph 0012).

With respect to Claim 4, Typpo discloses wherein said first detector comprises a first plurality of individual beta detectors and said second detector comprises a second plurality of beta detectors (Fig.2 & Paragraph 0033).

With respect to Claims 5-8, Typpo discloses a detector array 16 includes multiple individual detectors arrayed in a geometric pattern comprising a plurality of individual beta detectors (S11, S13, S31, S33) of an outer portion of said array surround a plurality of individual beta detectors (S12, S21, S23, S32) of an inner portion of said array (Fig.2 & Paragraph 0033).

With respect to Claim 19, Typpo discloses an apparatus comprising at least first S11 and second S13 outer detectors (Fig. 2).

With respect to Claims 9 and 20, Typpo discloses a method for measuring a characteristic of a web of material by detecting a beta radiation beam after passage through said web of material (Paragraph 0008) comprising: generating an inner signal representative of an inner portion of said beam received by an inner detector S21; generating at least one outer signal representative of a corresponding portion of said beam received by at least one corresponding outer detector S11; generating an inner characteristic signal R2 from said inner signal; generating at least one outer characteristic signal R1 from said at least one outer signal; generating a combined characteristic signal R from a combination of said inner and outer signals; and using said inner and outer characteristic signals to compensate said combined characteristic signal for variations in composition of said web a sheet of material through which said beta radiation beam passes. See Figs. 1 & 2; Paragraphs 0033, 0042, and 0060.

With respect to Claim 11, Typpo discloses aligning said first detector with said beam; and at least partially surrounding said first detector with said second detector (Fig. 2 & Paragraph 0025).

With respect to Claim 12, Typpo discloses forming said first detector as a first plurality of detectors (Fig. 2 elements S21, S23); and forming said second detector as a second plurality of detectors (Fig. 2 elements S11, S13).

With respect to Claim 13, Typpo discloses a plurality of detectors S11-S33; defining said first detector as a first portion of said plurality of detectors; and defining said second detector as a second portion of said plurality of detectors. See Paragraphs 0025 & 0033.

With respect to Claim 14, Typpo discloses generally aligning said first portion of said plurality of detectors with said beam (Fig. 1 & Paragraph 0025); and at least partially surrounding said first portion of said plurality of detectors with said second portion of said plurality of detectors (Fig. 2).

***Allowable Subject Matter***

Claims 2 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claims 2 and 10 are allowable over the art of record because the prior art does not teach or suggest a third detector at least partially surrounding said first detector and said second detector and generating a third signal representative of a third portion of said beam received by said third detector.

Claims 15-17 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: Claims 15-17 are allowable over the art of record because the prior art does not

Art Unit: 2878

teach or suggest generating a first and second signal of a beta radiation beam by a first and second detectors respectively, and determining a measurement error array and a correction signal array.

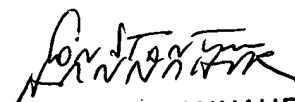
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mindy Vu whose telephone number is 571-272-8539. The examiner can normally be reached on M-F 9am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mv

  
CONSTANTINE HANNAHER  
PRIMARY EXAMINER  
GROUP ART UNIT 2878